## DETERMINATION OF NONYLPHENOL, BISPHENOL A, p-TERT-OCTYLPHENOL, NONYLPHENOL MONOETHOXYLATE AND NONYLPHENOL DIETHOXYLATE IN ENVIRONMENTAL WATERS BY GAS CHROMATOGRAPHY MASS SPECTROMETRY BY ASTM D7065-06 Page 1 of 4 VELAP ID Facility Name: Assessor Name: \_\_\_\_\_\_Analyst Name: \_\_\_\_\_\_Inspection Date\_\_\_\_ N/A Comments **Relevant Aspect of Standards** Method Ν Reference Records Examined: SOP Number/ Revision/ Date Analyst: Sample ID: \_\_\_\_\_\_ Date of Sample Preparation:\_\_\_ Date of Analysis: Were solvents, reagents, glassware, and other apparatuses routinely demonstrated to be free from 6.1 interferences by the analysis of method blanks? Was glassware cleaned with acetone and 6.2 methlylene chloride after washing? Was reagent water demonstrated to not contain contaminants at concentrations significant to 8.2 interfere with the analysis? Were grab samples collected in glass sample 10.1.1 containers? At sampling, were samples iced or kept at 0 to 4°C 10.1.1 without freezing? At preservation, were samples adjusted to a pH 2 10.2.1 with H2SO4 and stored at 0 to 4°C until extraction? Were samples extracted within 28 days of 10.2.1 collection? Were extracts analyzed within 40 days of 10.2.1 extraction? Was the instrument calibrated with 5 calibration 12.1 standards? Were calibration standards, once diluted in 12.2.3 methylene chloride, stored at 0°C or less? Notes/ Comments:

DETERMINATION OF NONYLPHENOL, BISPHENOL A, p-TERT-OCTYLPHENOL, NONYLPHENOL MONOETHOXYLATE AND NONYLPHENOL DIETHOXYLATE IN ENVIRONMENTAL WATERS BY GAS

## CHROMATOGRAPHY MASS SPECTROMETRY BY ASTM D7065-06 Page 2 of 4 Method Υ N/A Comments **Relevant Aspect of Standards** Ν Reference [If calibration curves were not used] Was the Relative Response Factor (RRF) of earch target 12.2.5 and surrogate compound in the calibration? Only if the RRF was <35% RSD over the entire working range, was the Average Response Factor 12.2.6 (ARF) used for calculations? Was "Table 4" in the reference method used to determine which Internal Standard [if IS 12.2.5 calculations were use] were used to quantify the analytes? For DOCs, were the average and percent recovery data compared to the criteria in "Table 5" of the 12.3.2 reference method? Was the LCS taken through all steps of the analytical method including sample preservation 12.4.1 and pretreatment? Was an LCS included with each batch of 20 12.4.1 samples or less? Was the LCS concentration approximately near the 12.4.1 midpoint of the curve? Did the LCS results fall within the limits of "Table 12.4.1 5"? Was at least one matrix spike included with each 12.6.1 Did the results of the matrix spike meet the limits of "Table 5"? 12.6.4 Was a matrix duplicate analyzed with each batch? 12.7.1 Did the RPD of the matrix duplicate meet the limits 12.7.2 in "Table 5"? Before analyzing any samples, did the m/z criteria of the DFTPP performance check meet the limits in 12.10 "Table 6" of the reference method? Was the RRF of a mid-level calibration verification verified each working day and after each set of 12.11 samples before the expiration of the 24-hour clock? Notes/ Comments:

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Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Liquid-Liquid Extraction					
Was the alkylphenol surrogate spike solution added to samples in the extraction apparatus?	13.1				
Was the pH of the samples verified to be pH <2 after the sample was added to the extractor?	13.1				
After extraction into methylene chloride, were extracts dried over anhydrous sodium sulfate until new additions of sodium sulfate remained "silty"?	13.2				
Was Internal Standard added to the extract in the vial?	13.2				
Optional Separatory Funnel Extraction		1			
Were separatory funnels rinsed with de-ionized water, then acetone, and finally methylene chloride prior to use?	13.3				
Was the surrogate (and spiking compounds) added to the sample in the separatory funnel?	13.3				
Was the pH of the samples <2 prior to extraction?	13.3				
Were samples extracted 3 times with 60 mL portions of methylene chloride?	13.3				
Did each of these 3 extractions involve vigorous shaking for 10 minutes?	13.3				
If emulsions formed, were proper emulsion breaking techniques used?	13.3				
Were extracts dried with anhydrous sodium sulfate?	13.3				